

ABSTRACT OF THE DISCLOSURE

A proportional pressure control valve particularly for electro-hydraulic transmissions. The valve includes a cage having pump, clutch, and tank port openings. A spool is received within the cage for controlling flow between the clutch port and the pump and tank ports of the system. The spool has a feedback pressure surface responsive
5 to an applied feedback fluid pressure urging the spool to move towards a first position allowing flow between the clutch and tank ports. A feedback pressure chamber is defined within the cage for developing the feedback fluid pressure. A clutch port pressure feedback passage couples the clutch port with the feedback pressure chamber for admitting flow from the clutch port into the feedback pressure chamber to develop the
10 feedback fluid pressure. The clutch port pressure feedback passage is formed within the cage wall to couple the control pressure chamber in fluid communication with the system clutch port.